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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/348,416	07/07/1999	CHAD A. BANTER	FL/128	5205

7590 03/26/2002

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EXAMINER

DABNEY, PHYLESHA LARVINIA

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 03/26/2002

75

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/348,416

Applicant(s)

BANTER ET AL.

Examiner

Phylesha L Dabney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 13-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-5, 8-12, 26-33, 34-36 is/are rejected.
- 7) ☐ Claim(s) 6, 24-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The request filed on 18 March 2002 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/348,416 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 9, 11, 26, 29, 30-33, and 35-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Repolle et al (U.S. Patent No. 5,828,012).

Regarding claim 1, Repolle discloses a sound-transmissive protective cover assembly (14), comprising a microporous membrane (22, 30; col. 5 lines 49-51 and col. 6 lines 21-24; fusion bonding) supported only around its periphery by at least one adhesive support system (40) such that at least a portion of the membrane (22, 30) is exposed to the atmosphere and free to move in response to acoustic energy, the assembly having an instantaneous water entry pressure acoustic transmission loss of no more than 3 dB (col. 4, lines 20-21) in the range of frequencies from 300 to 3000 Hz (col. 10, line 27).

Regarding claim 2, Repolle discloses the sound-transmissive protective cover further comprising means for bonding the assembly (14) to an acoustic device (figs 1-2, cellular phone).

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Regarding claim 3, Repolle discloses the sound-transmissive protective cover, wherein the acoustic device is a transducer (12 or 13).

Regarding claims 4 and 33, Repolle discloses the assembly (14) further comprising a black color (col. 5, lines 14-15).

Regarding claim 9, Repolle discloses the assembly (14) having a transmission loss of no more than 2 dB (col. 4, lines 20-21).

Regarding claims 11 and 36, Repolle discloses the membrane (20, 22, 24) is ePTFE (col. 5, lines 7-10).

Regarding claims 12, 30-32 and 35, Repolle discloses the support system is a ring-shaped, coextensive, plastic, encapsulating gasket (40).

Regarding claims 26 and 29, Repolle discloses a method of using a microporous membrane (22, 30) as a sound-transmissive acoustic protective cover for an electronic device having a transducer, comprising: supporting a microporous membrane (22, 30; col. 5 lines 49-51 and col. 6 lines 21-24; fusion bonding)) only around its periphery with at least one adhesive support system (40) such that at least a portion of the membrane (22, 30) is exposed to the atmosphere and free to move in response to acoustic energy; and orienting the supported microporous membrane (22) so as to cover the transducer in the electronic device, thereby forming a sound-transmissive acoustic protective cover; whereby the cover has an instantaneous water entry pressure of at least one meter water column and an overall acoustic transmission loss of no more than 3 dB (col. 4, line 21) in the range of frequencies from 300 to 3000 Hz (col. 10, line 27).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 8, 10, 27, 28, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Repolle et al (U.S. Patent No. 5,828,012).

Regarding claims 5, 27, and 34, Repolle does not teach the assembly (14) or method further comprising an oleophobic treatment on the microporous membrane (22, 30). However, the Examiner takes official notice that it is well-known in the art to apply oleophobic treatments to PTFE or ePTFE materials. Therefore, it would have been obvious to one of ordinary skill in the art that to apply oleophobic treatment to make the material into a filter for repelling particular oils or gases.

Regarding claim 8, Repolle teaches the disclosed invention except he does not teach the assembly (14) having a particulate collection efficiency of at least 99.99999%. The Examiner takes official notice that it is well known in the art to be able to apply an Industrial Filtration Panel Tester developed by Gore & Associates, which consists of challenging a porous sample with a stream of air carrying a dust particle at a controlled flow rate and velocity. Therefore, it would have been obvious to one of ordinary skill that to obtain particulate collection efficiency of at least 99.99999% through routine experimentation necessary for achieving the optimum or workable ranges.

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Regarding claim 10, Repolle teaches the disclosed invention except he does not teach the assembly (14) having a long-term water entry pressure of at least 1 meter water column for a minimum of 30 minutes. The Examiner takes official notice that it is well-known in the art to be able to apply a Water Entry Pressure (WEP) Test developed by Gore & Associates to determine the waterproofness, which consists of challenging a porous sample with a column of water at a controlled pressure. Therefore, it would have been obvious to one of ordinary skill that to obtain a long-term water entry pressure of at least 1 meter water column for a minimum of 30 minutes through routine experimentation necessary for achieving the optimum or workable ranges.

Regarding claim 28, Repolle does not teach the support system having at least one supplemental bonding site extending across a portion of the inner unbounded region. However, the Examiner takes official notice that it is known in the art to dampen a planar member at an internal region for to make the membrane stiffer and stable. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a support system at an internal region for stiffness and stability of the membrane.

Allowable Subject Matter

Claims 6, and 24-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phylesha L Dabney whose telephone number is 703-306-5415. The examiner can normally be reached on Mondays, Tuesdays, Wednesdays, Fridays 8:30-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231


Or faxed to:

(703) 872-9314, for formal communications intended for entry and for informal or draft communications, please label "Proposed" or "Draft" when submitting an informal amendment.

(703) 306-0377, for customer service questions.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

PLD


March 23, 2002


**DUC NGUYEN
PRIMARY EXAMINER**